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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,451	07/23/2003	Jan Raebiger	2000.108200	7974
23720	7590	07/14/2005	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			MATHEWS, ALAN A	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/625,451

Applicant(s)

RAEBIGER ET AL.

Examiner

Alan A. Mathews

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15,20-22 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 26 is/are allowed.
- 6) ☒ Claim(s) 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20 is rejected under 35 U.S.C. 102(a) as being anticipated by Bode et al. (U. S. Patent Application Publication No. 2002/0106821 A1). Bode et al. discloses in figures 2 and 3 and pages 3 and 4, paragraphs # 31-35, a method of controlling a multi-step exposure of substrates. Paragraph # 34 discloses measuring the thickness of the layers of photoresist at various locations across the surface of wafer 21, which is the step of obtaining pre-exposure measurement data related to a predefined location on a substrate to be exposed. The controller 38 then determines, based upon the measurement data by metrology tool 29, the exposure dose in the stepper 30, which is the step of adjusting at least one exposure parameter for said predefined location on the basis of said pre-exposure measurement data. Step 37 in figure 4 and paragraph # 35 in the specification disclose that the exposure process is comprised of across wafer variation in exposure dose in response to the thickness measurements, which is the step of exposing a substrate at said predefined location with the adjusted at least one exposure parameter. With

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respect to Applicant's arguments, it is noted that Applicant has not presented arguments directed to why Applicant considers claim 20 allowable.

3. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (U. S. Patent Application Publication No. 2002/0001070 A1). Park discloses in paragraphs # 54 and # 56 that the pre-exposure step process 10 should help determine the photo-exposure time. Note that a sentence in paragraph # 56 states "Also, the thickness of the silicone-nitride film, which has been formed in a pre-exposure step process of each prior task, is inspected, as are the line widths obtained from ADI when a desired photo-exposure time is used in the photo-exposure process". Park further discloses in figure 1 and paragraphs # 35, # 36, and # 40, an after development inspection (ADI) process (after exposure) for obtaining information about an inline parameter (line width). Paragraphs # 44 and 61 disclose updating an exposure parameter (exposure time) on the basis of process 30, which is the same thing as the step of adjusting at least one exposure parameter. Thus, both pre-exposure and post-exposure measurements are taken to determine the photo-exposure time. Step 20 in figure 1 discloses the step exposing the wafer (substrate). With respect to Applicant's arguments, it is noted that Applicant has not presented arguments concerning claims 20-22.

*Allowable Subject Matter*

4. Claims 15 and 26 are allowed. The reason for the indicated allowability of the claims are as follows:

The prior art does not disclose or suggest inline measurement data obtained from one or more of said substrates, wherein at least a portion of said inline measurement data is obtained from substrates prior to exposure and from substrates after exposure; and electrical measurement data related to said circuit feature after said circuit feature is completed in combination with all the other steps recited in independent claim 15.

The prior art does not disclose or suggest a control unit configured to receive information about an inline parameter indicative of a characteristic of a predefined location on a plurality of substrates, said information comprising: inline measurement data obtained from one or more of said substrates, wherein at least a portion of said inline measurement data is obtained from substrates prior to exposure and from substrates after exposure and electrical measurement data related in a circuit feature on one of said substrates after said circuit feature is completed in combination with all the other elements recited in independent claim 26.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

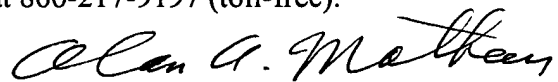
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan A. Mathews  
Primary Examiner  
Art Unit 2851

AM